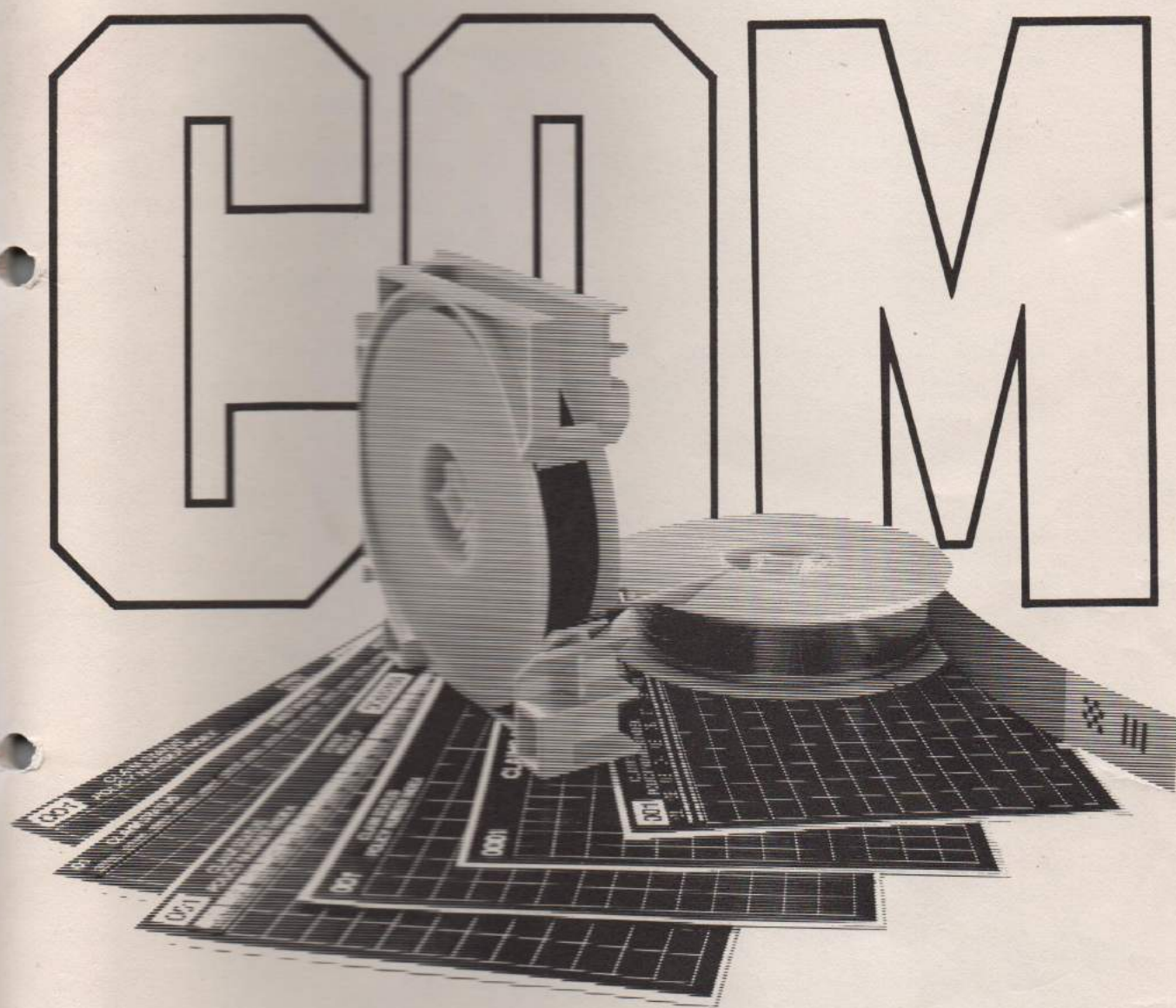




Computer Output Microfilm Guide from Kodak.



Fast, cost-efficient, dry laser printing with
Kodak Komstar microimage processors.

COM FROM KODAK



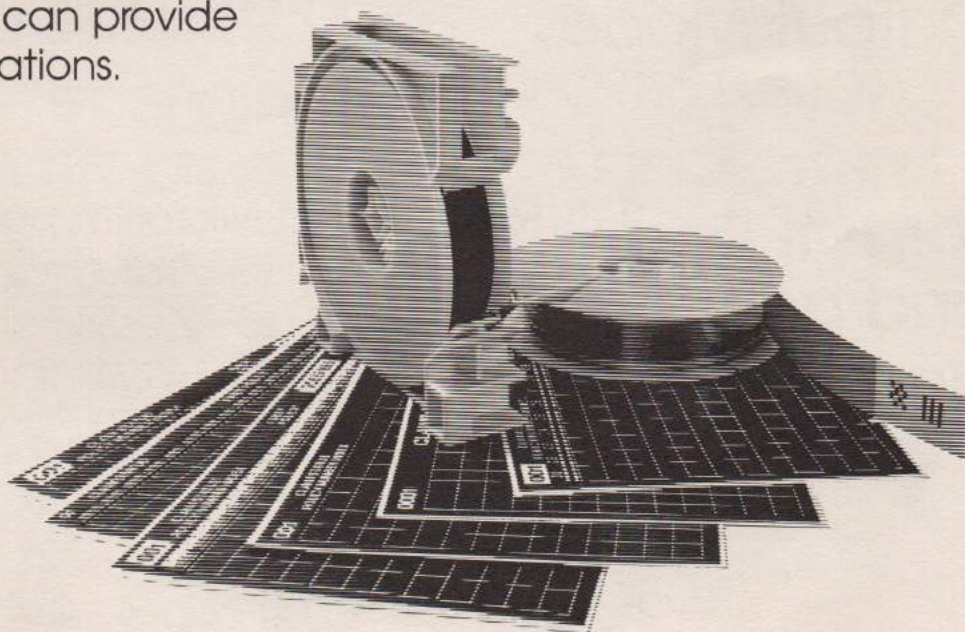
Introduction

This guide will help you review the features and the benefits of advanced laser and dry film technology in computer output microfilming from Kodak.

Kodak Komstar microimage processors are true computer peripherals. They offer dramatic improvements in computer output management and efficiency—while actually decreasing operating costs.

Kodak laser printers offer a choice of on-line or off-line operations as well as a broad range of flexible microfilm formats and indexing techniques.

Using this guide, you can better understand the various output options and estimate the potential savings that Komstar laser printers can provide for your operations.



COM FROM KODAK

Laser Film Printing

Kodak Komstar microimage processor.

The Kodak Komstar microimage processor uses advanced laser technology to convert computer output to ready-to-use microfilm images—in a single step.

Modes of operation

- On-line
 - Off-line
 - On-line/Off-line switchable
-

Output Modes

- 16 mm roll
 - Microfiche
-

Format flexibility and packing density

16 mm Microfilm per 215-ft roll

- 1-up— 11,390 frames (pages)
- 2-up—28,854 frames (pages)
- 3-up— 49,941 frames (pages)

4 x 6 inch Microfiche

- 63 pages—24X lens
 - 270 pages—32X lens
 - 504 pages—42X lens
 - 700 pages—48X lens
-



Laser Film Printing

Titling

- Variety of formats
 - Variety of sizes
 - Mixed sizes
 - Choice of polarity
 - Mixed polarity
 - Extracted titling
 - Fixed titling
 - Logos and symbols
-

Indexing

16 mm Microfilm

- Eye-readable
 - Sequential retrieval
 - Image control
 - Binary code
-

Microfiche

- Eye-readable
 - Corner
 - Column top
or bottom
 - Various formats
-

COM FROM KODAK

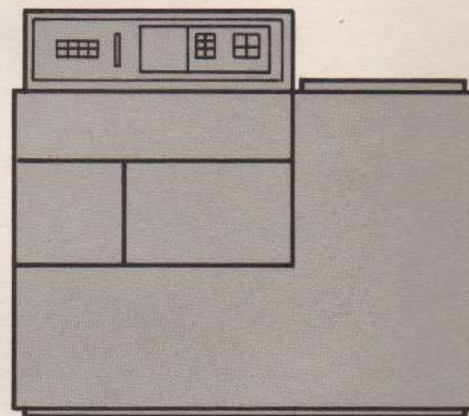
Modes of operation

Kodak Komstar microimage processors on-line, off-line, and off-line/on-line switchable configurations are available to maximize productivity in your data processing operations.

On-line

The Kodak Komstar 100 microimage processor is an on-line microfilm printer with intelligent control. Formatting is done using mainframe resources.

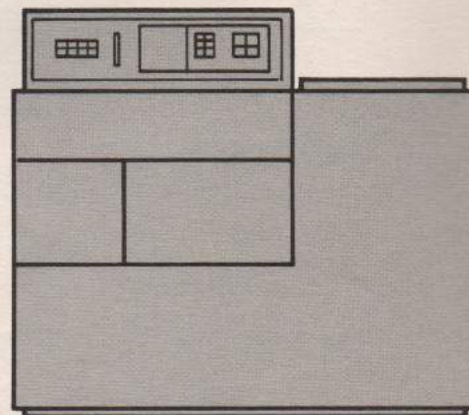
- Fast, efficient throughput
- Completely dry
- On-demand printing



On-line

The Kodak Komstar 200 microimage processor is used on-line when fast, efficient on-demand printing is desired. It employs a front-end minicomputer that formats the data from the mainframe.

- Acts as a true peripheral (interfaces with your mainframe)
- Immediate processing of your reports
- Excellent sysout printer



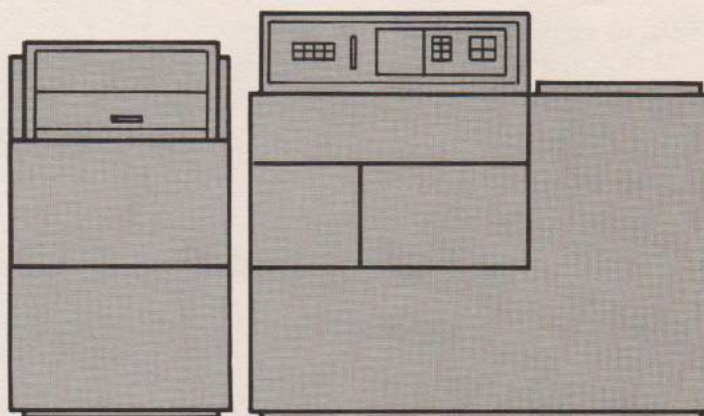


Modes of operation

Off-line

The Kodak Komstar 300 microimage processor is a stand-alone, intelligent unit that includes a tape drive for off-line operation.

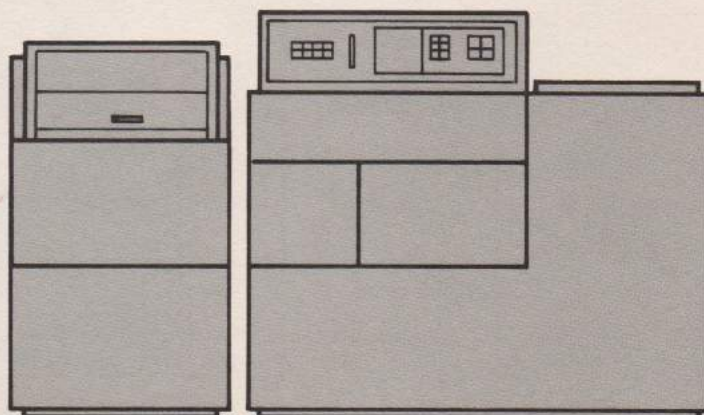
- Stand-alone operation (completely self-sufficient)
- No mainframe software packages required
- Independent of mainframe computer resources
- Accepts a variety of tape formats



Off-line/on-line switchable

The Kodak Komstar 200/300 microimage processor provides the benefits of both on-line and off-line processing with the flip of a switch!

- A true computer peripheral
- Off-line or on-line processing
- No mainframe overhead for software required



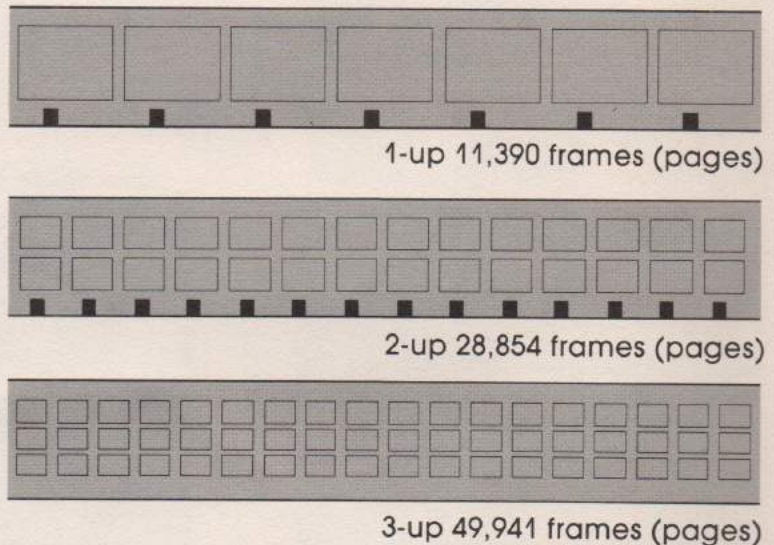
COM FROM KODAK

Film packing density

Laser imaging from Kodak provides for format flexibility and film packing density to meet specific job requirements.

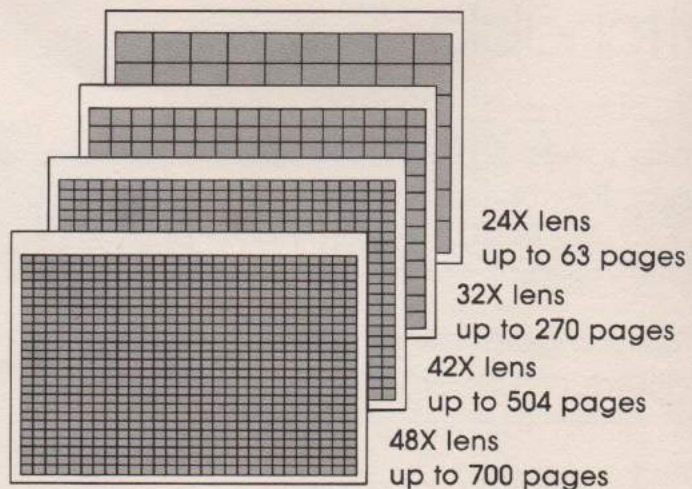
215-ft 16 mm roll

- Ideal for long reports
- Up to 421.9 million characters of storage (49,941 pages) per 215-ft roll
- Cost savings
 - Less film usage
 - Less duplicate film usage
 - Less operator intervention
- High-volume retrieval
- Software-controlled



Microfiche

- Fast retrieval
- Cost savings
 - Fewer original microfiche
 - Fewer duplicates
 - Less operator intervention
- Software-controlled





Format selector

A wide variety of fiche and roll formats are available. This chart will help you select the fiche and roll formats best suited to your needs.

- First locate the page format that is most typical of your data.
- Then select the appropriate film format.
- Film should be viewed on a reader having proper blowback for the page size on film.
- Form slide design should be considered when selecting film format.

PAGE FORMAT		FILM FORMAT			READER
Maximum Characters Per Line	Maximum Lines Per Page	Lens Used	Pages Per Fiche	Pages per 215-Ft Roll 16 mm	Reader Lens Range
132	64	24:1	63	3,486	18X-24X
132	64	32:1	140	4,700	20X-28X
132	64	32:1	270	5,695	35X-42X
132	64	42:1	208	6,177	35X-42X
132	64	42:1	270	—	38X-48X
132	64	42:1	504	18,818	42X-58X
132	64	48:1	270	13,944	38X-48X
132	64	48:1	418	27,051	48X-58X
132	64	48:1	621	—	48X-58X
132	64	48:1	700	49,941	48X-58X
161	86	24:1	63	3,486	18X-24X
161	86	42:1	208	6,177	35X-42X
161	86	48:1	270	13,944	38X-48X
207	99	24:1	63	3,486	18X-24X
207	99	42:1	208	6,177	35X-42X
207	99	48:1	270	6,972	38X-48X

COM FROM KODAK

Savings estimator

Compare your current cost of printing with the cost of using a Kodak Komstar microimage processor.

PAGES	<u>500,000</u> Volume/Month	<u>132</u> Max. Characters/Line	<u>64</u> Max. Lines/Page
-------	--------------------------------	------------------------------------	------------------------------

ORIGINAL FICHE—Format A

KOMSTAR LENS	<u>48:1</u>					
VOLUME/MONTH	<u>500,000</u>	=	<u>1851</u>	×	<u>.28</u>	\$ <u>518.28</u>
PAGES/FICHE	<u>270</u>		Fiche per Month		Cost per Fiche	

DUPLICATE FICHE—Format A

NUMBER OF DUPLICATES	<u>6</u>	×	<u>1851</u>	×	<u>.05</u>	\$ <u>555.30</u>
			Fiche per Month		Cost per Duplicate	

Total Monthly Cost \$ 1073.58

ORIGINAL FICHE—Format B

KOMSTAR LENS	<u>48:1</u>					
VOLUME/MONTH	<u>500,000</u>	=	<u>714</u>	×	<u>.28</u>	\$ <u>199.92</u>
PAGES/FICHE	<u>700</u>		Fiche per Month		Cost per Fiche	

DUPLICATE FICHE—Format B

NUMBER OF DUPLICATES	<u>6</u>	×	<u>714</u>	×	<u>.05</u>	\$ <u>214.20</u>
			Fiche per Month		Cost per Duplicate	

Total Monthly Cost \$ 414.12

TOTAL SAVINGS/MONTH \$ 659.46
% OF SAVINGS 61%

- Present system job analysis for paper or OEM

- ☐ Space
- ☐ Supplies
- ☐ Equipment
- ☐ Labor
- ☐ Duplication

- Proposed system job analysis

- ☐ Space
- ☐ Supplies
- ☐ Equipment
- ☐ Labor
- ☐ Duplication

- Evaluation of equipment needs

- Savings analysis

- Return on investment

4.00
30.00
20.00
150.00
3.06
22.96
24.00
180.00
7.50
56.25
439.21

PRINTCOM H.C.

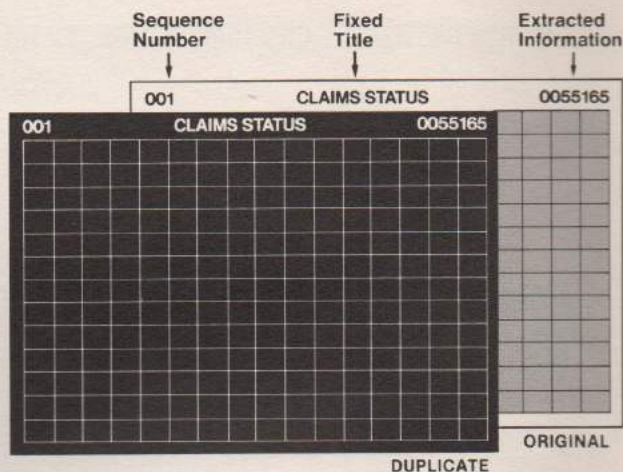
COM FROM KODAK

Fiche titles

Title character options

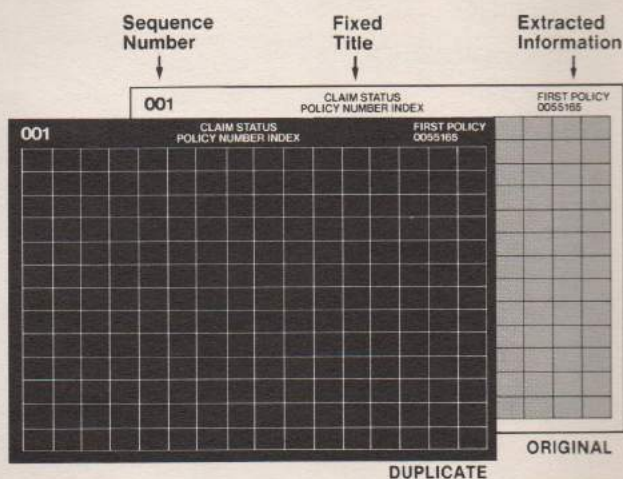
Large title characters

- Large characters in a single row provide easy reading
- Facilitates rapid retrieval



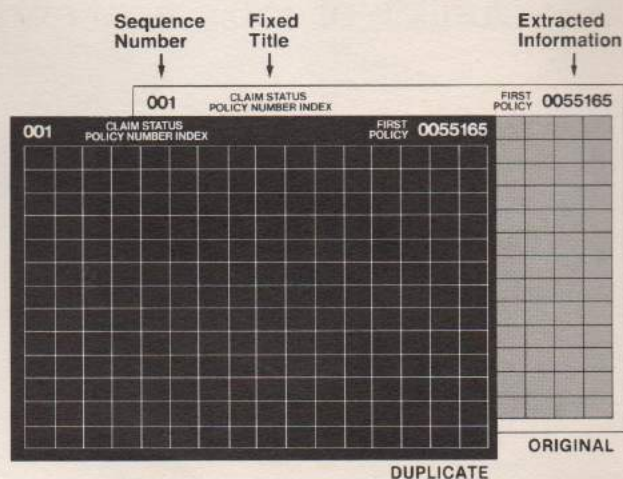
Small title characters

- Two lines of small characters
- Provides more complete title information



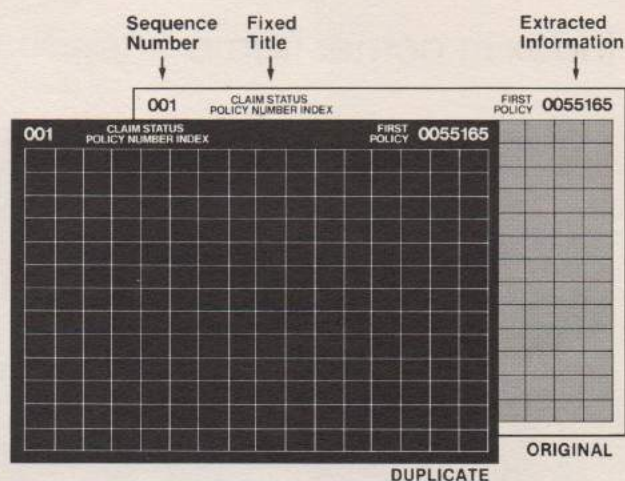
Mixed title characters

- Large and small title characters
- Provides benefits of emphasis and organization of descriptors

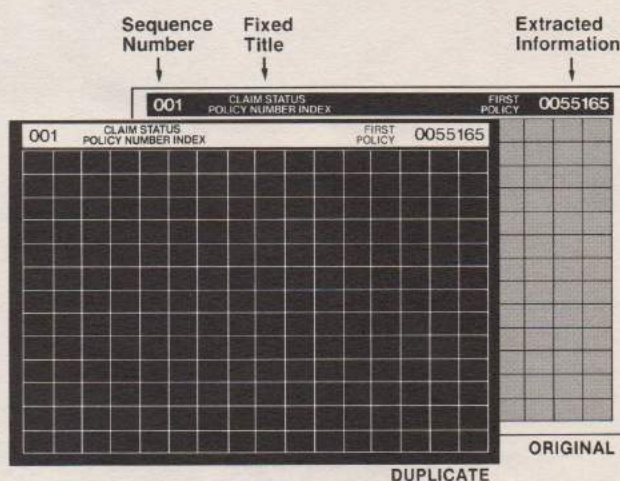


Standard polarity

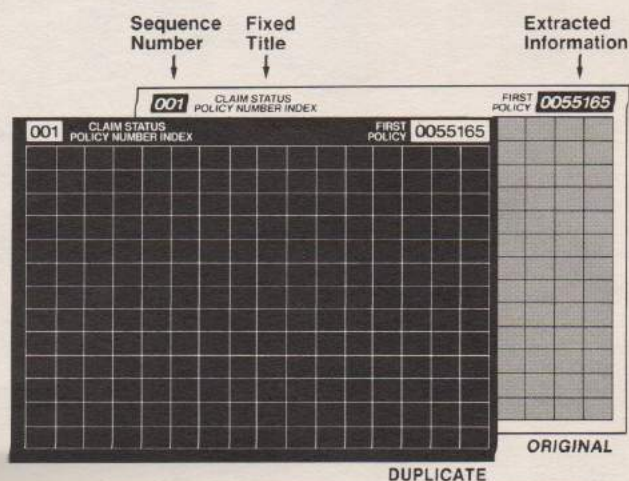
- Title characters appear light on a dark background
- User preference



- Title characters appear dark on a light background
- User preference



- Portions of title characters are printed in reverse polarity
- Allows key fields to be highlighted

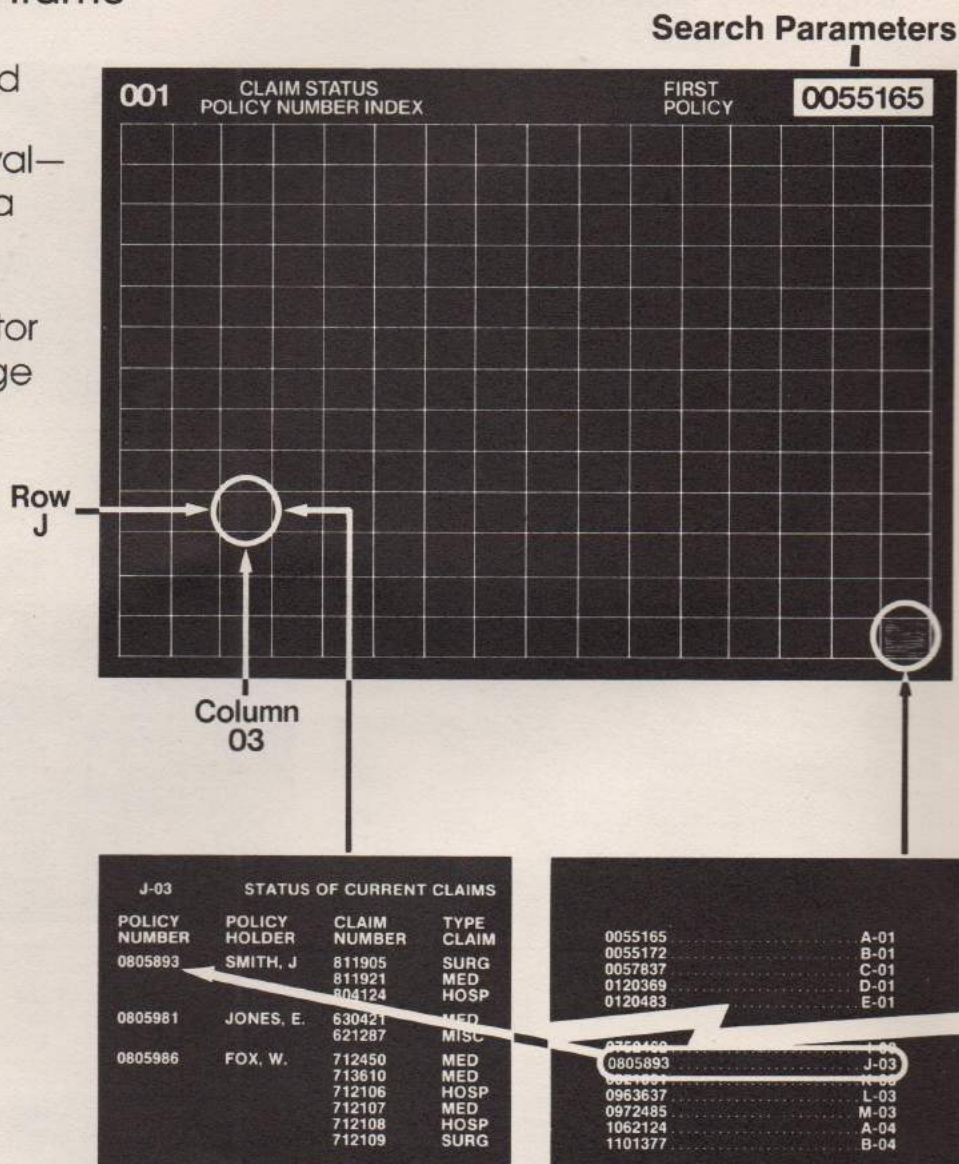


COM FROM KODAK

Corner index

Index in corner frame

- Widely accepted
- Facilitates retrieval—each frame on a fiche is indexed
- Increases operator efficiency in page location

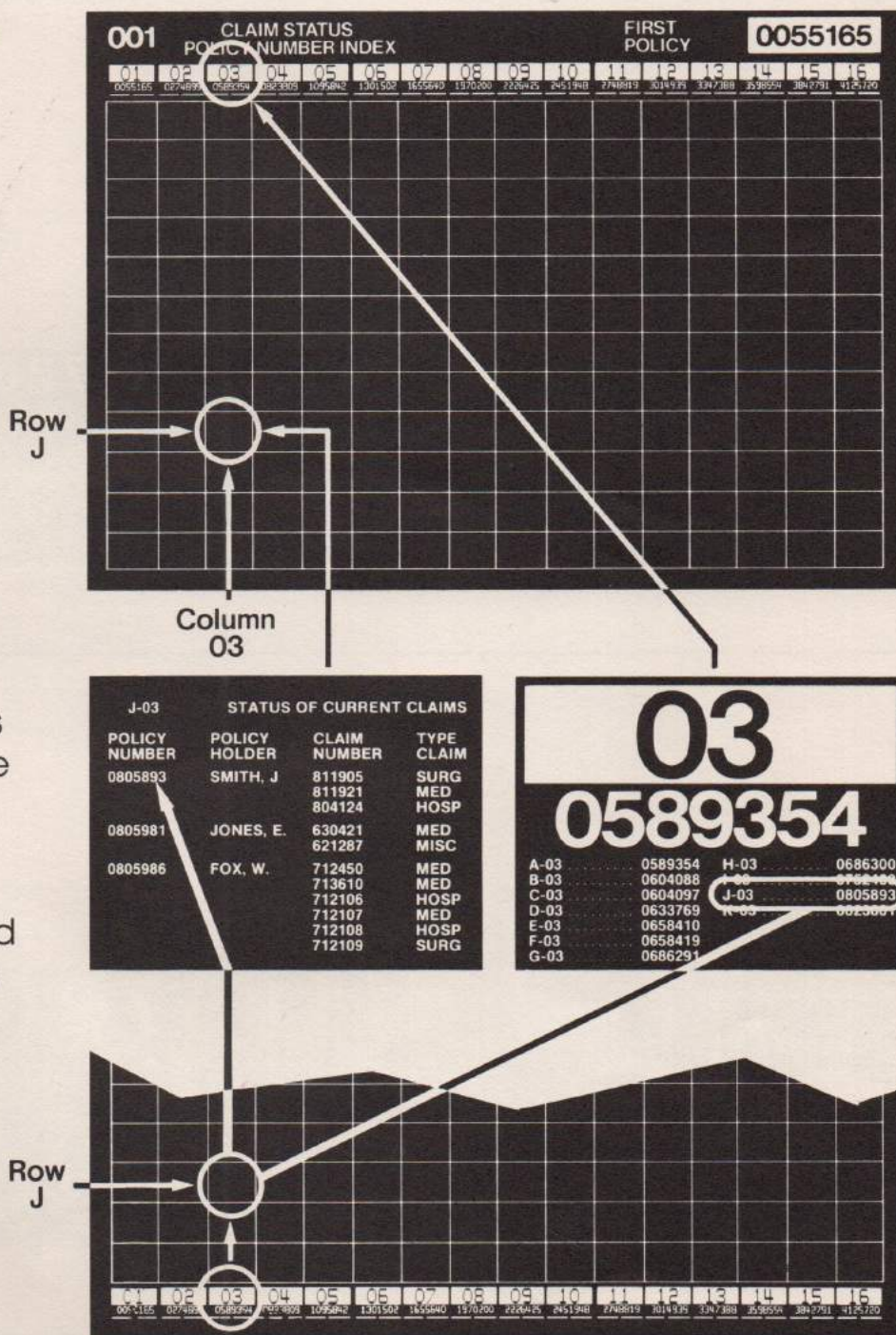




Column Index

Index at top or bottom of each column

- Direct access to data—provides eye-readable indexing information for each column
- Increases operator efficiency—uses a "right-angle search" common to microfiche readers
- Saves retrieval time—eliminates searching for the column coordinate required with corner index and provides from-to information



COM FROM KODAK

Column index/frame formats

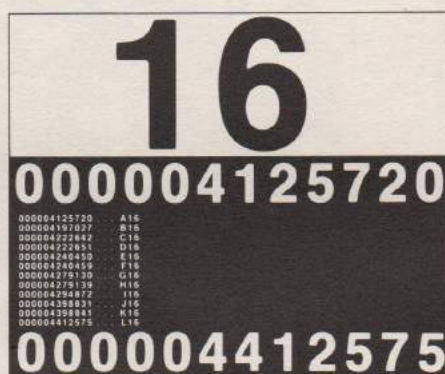
Select the microfiche indexing format best suited to your special applications—four options are available at either the top or bottom of the fiche

Format 1

Top



Bottom



Large eye-readable
column number

Eye-readable
first index entry

fine index entries

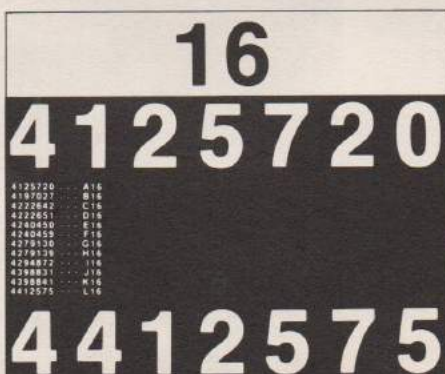
Eye-readable
last index entry

Format 2

Top



Bottom



Eye-readable
column number

Larger eye-readable
first index entry

fine index entry

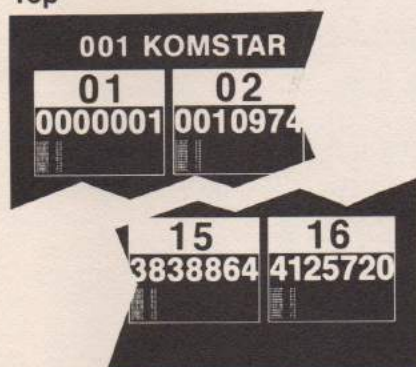
Larger eye-readable
first index entry



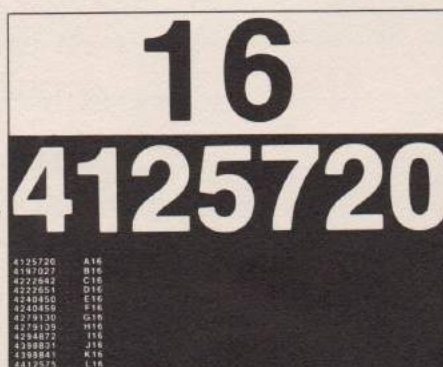
Column index/frame formats

Format 3

Top



Bottom



Medium eye-readable
◀ column number

Large eye-readable
◀ first index entry

◀ fine index entries

Format 4



Large eye-readable
◀ first index entry

◀ fine index entries

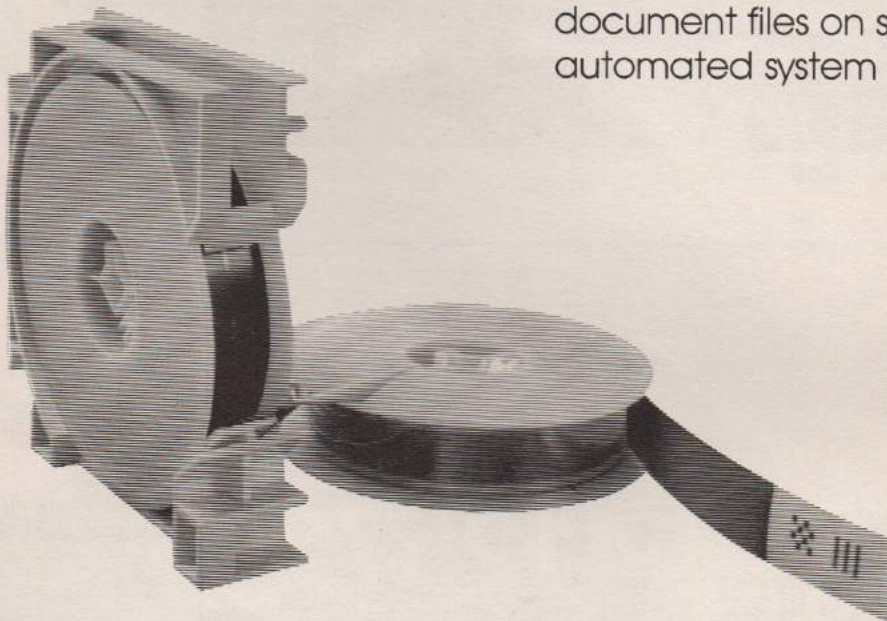
Large eye-readable
◀ last index entry

COM FROM KODAK

16 mm roll-film retrieval formats

Unique capability from Kodak for dry laser printing for 16 mm roll-film retrieval

- High packing density—one 215-ft roll vs. 71 - 4 x 6 inch microfiche
- File integrity—eliminates misfiles
- Various retrieval options (basic to sophisticated)
- Automatically retrieve computer output reports and source document files on same automated system



MAGAZINE

ROLL

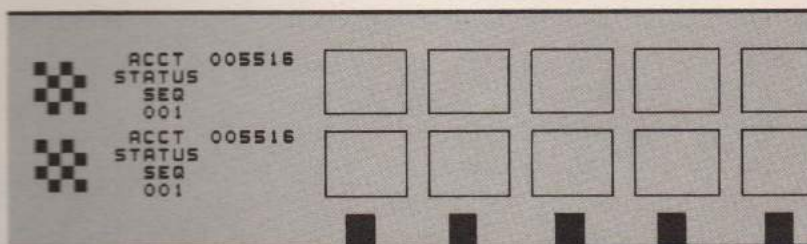


16 mm roll-film retrieval formats

Retrieval options for 16 mm film

Eye-readable retrieval

- Large fixed and variable titles provide quick identification of the information contained in the magazine or roll



Sequential retrieval

- Basic retrieval technique by location of sequential data.

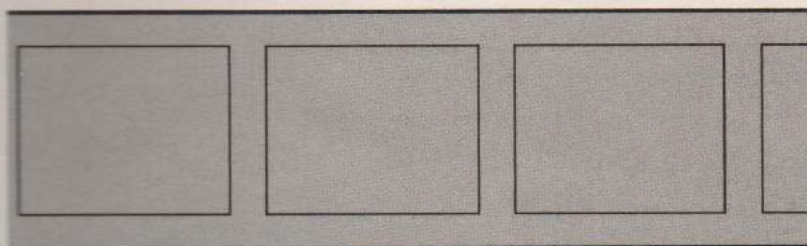
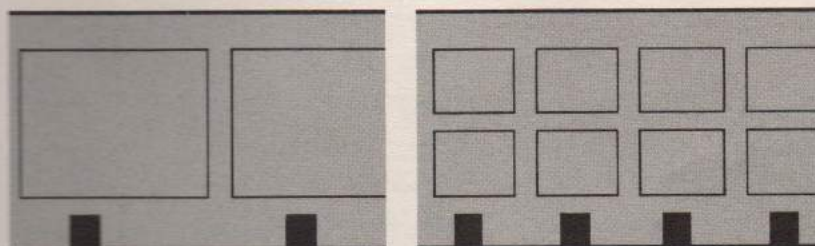


Image control (IC) retrieval

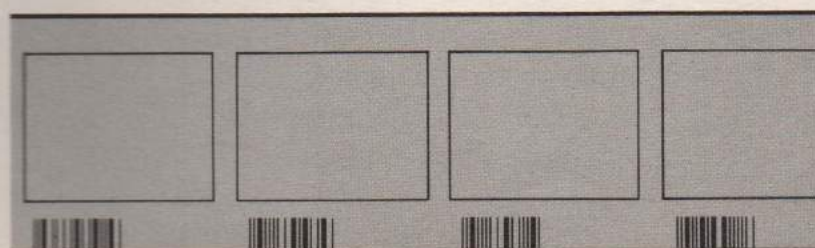
(IMT microimage terminals)

- Mark (blip) is placed below each data frame
- Terminal counts the document marks to find correct image
- Higher film packing density (2-up)



Oracle microimage terminal retrieval

- Machine-readable code provides random-access, stand-alone retrieval
- Fully automated retrieval
- No external index required



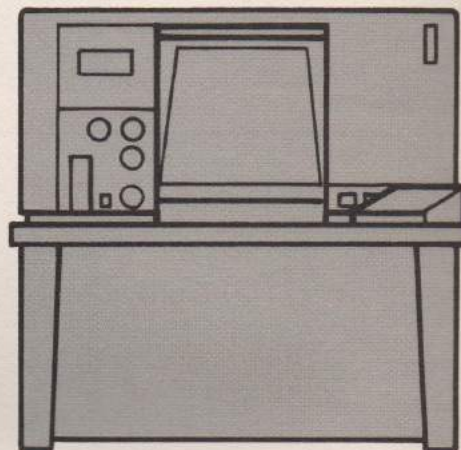
COM FROM KODAK

16 mm retrieval terminals

Kodak IMT microimage terminal

The Kodak IMT-150 microimage terminal is a high-speed, keyboard-request unit (with printer) for automatically retrieving images recorded on blipped 16 mm roll microfilm.

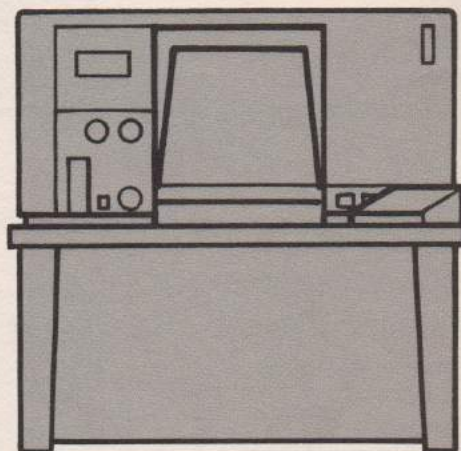
- Microprocessor-controlled
- Programmed image positioning
- Automatic multilevel search capability
- Multiple search programs
- Dry, ready-to-use prints in seconds
- Can be used as a stand-alone device, or as an on-line peripheral to a computer system
- Operator assistance codes and service diagnostics



Kodak Oracle microimage terminal

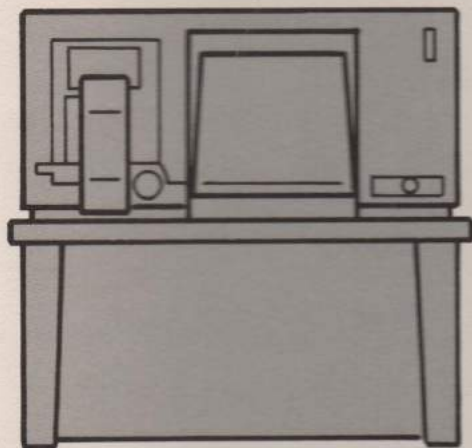
The Kodak Oracle microimage terminal is an automated, random-access retrieval device that provides rapid access to information stored on encoded 16 mm roll microfilm.

- Automatic threading and image positioning
- Visual display of coded images
- Automatic refile
- Dry, ready-to-use prints in seconds
- Requires no external cross-reference index for accessing film images





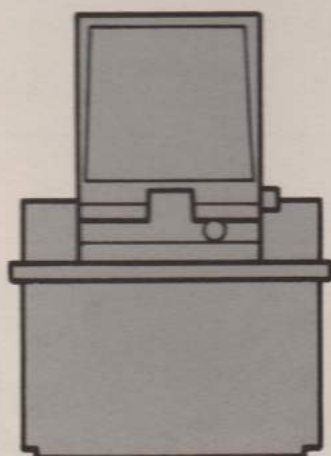
Microfiche retrieval terminals



Kodak Starfiche reader-printer

The Kodak Starfiche reader-printer combines speed and simplicity for location of information on microfiche, brilliant screen viewing, and precise image focusing.

- Fast selection of images with "scan" knob
- Illuminated "hot dot" on index indicates correct image location
- Quick-flip, 90° image rotation
- 9 interchangeable lenses for 17X to 48X magnification
- Dry prints in seconds



Kodak Trimlite F reader-printer

The Kodak Trimlite F reader-printer is an inexpensive, easy-to-use, compact unit that accepts not only microfiche, but also film folios and jackets.

- Compact, portable unit for home or office
 - Brilliant screen for roomlight reading
 - 20X or 40X magnification
 - Easy loading; simple focusing
 - Complete indexing scales
-

COM FROM KODAK

Summary of features

This guide has shown the versatility of the Kodak Komstar microimage processor and its ability to meet your operating needs.

Modes of operation

- On-line
- Off-line
- On-line/off-line

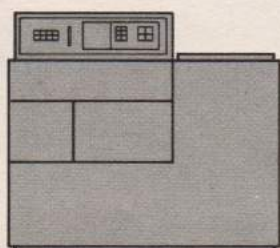
Output modes

- 16 mm roll output
- Microfiche output

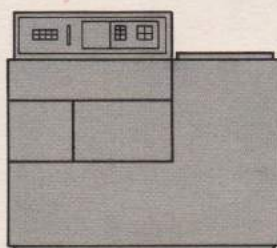
Wide range of film packing density

- Up to 49,941 pages/215-ft, 16 mm roll
- Up to 700 pages/microfiche

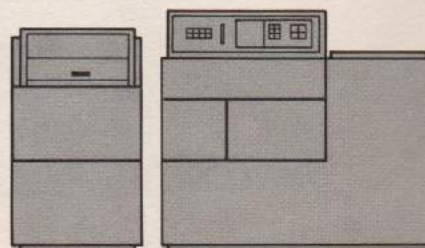
Kodak Komstar 100
microimage processor



Kodak Komstar 200
microimage processor



Kodak Komstar 300
microimage processor





Microfiche title options

- Large title characters
- Small title characters
- Mixed title characters
- Standard polarity titling
- Reverse polarity titling
- Mixed polarity titling

Microfiche indexing

- Column indexing
- Corner indexing

16 mm roll-film retrieval

- Kodak IMT microimage terminals
- Kodak Oracle microimage terminal

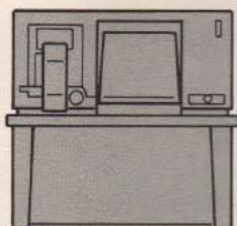
Cost savings analysis

- Printcom H.C. program

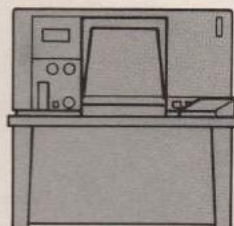
Want more information?

Ask your Kodak representative for more details on this state-of-the-art microfilm technology.

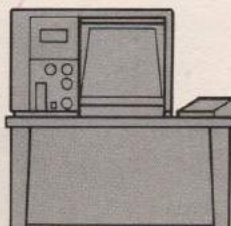
Kodak Starfiche
reader-printer



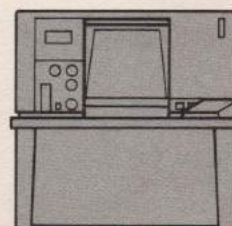
Kodak Oracle
microimage terminal



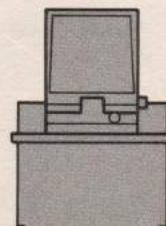
Kodak IMT-100
microimage terminal



Kodak IMT-150
microimage terminal



Kodak Trimlite F
reader-printer





EASTMAN KODAK COMPANY/BUSINESS SYSTEMS MARKETS DIVISION/ROCHESTER, NEW YORK 14650

Kodak Canada Limited/Business Systems Markets Division/Toronto, Ontario M6M 1V3 Canada

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A-5056

Printed in U.S.A.